

## ***MAKE YOUR OWN WORM FARM***

### **The Container:**

Most anything can be turned into a worm farm – bathtubs, drainage tubes, dresser drawers, tyres. My first worm farm was a plastic crate, then later the frame of an old television. Consider this an opportunity to be creative.

You need to keep basic concepts in mind: drainage, aeration, a good lid to exclude flies/rodents/pets, and enough depth to keep worms and waste covered. The size of the system is based on the volume of waste you wish to recycle: for a 15-litre bucket of food scraps per week, aim for at least 500 x 500 x 500.

Food scraps are mostly made of water, so as the worms “recycle” the food scraps, liquids are released (as worm pee, or simply as food juice). The basic bin-style worm farm (below) can drain directly onto the earth, or you can choose to catch the liquids in a tray to use later on plants and soil. A bin can be a single layer (pile), or stacked (for more capacity).

Unlike Earthworms, Compost Worms can live happily in a container that is not touching the earth’s soil; but remember, the worms have no place to go if their environment becomes unsuitable. This makes containers a bit more tricky, and vulnerable to temperature variations and smelly pockets of acidity. It’s easier to maintain a worm farm touching the earth and argue enough to allow worms to move away from areas they don’t like.

### **The basic bin (with a catchment tray for liquid fertiliser):**

Use 2 containers about 20-40 cm deep by 50 cm wide by 80 cm long (fish crate or large wooden drawer). One container houses the worms, and the other catches the liquid run-off. Drill holes in the worm tray, 6-10mm in the base and sides for breathing holes. In the second catchment tray (where there are no holes), install cross braces strong enough to support the other bin on top – wooden dowels work swell. Installing a tap in the bottom tray and raising the whole system onto bricks will make it easier to remove the liquid regularly. Although a bit of carpet can be used to cover the worms in the top bin, I prefer a solid lid to exclude flies. This style of worm farm can be run indoors, and should not be more than two high. Start this system with at least 250 g Compost Worms (about 1000). As an alternative, you could omit the second container, and sit the bin directly on the ground, so that the holes drain liquids to the soil beneath.

### **Tyre stacks:**

By far my favorite system, tyres are free and simple to create a worm farm. Start with two tyres per stack, or perhaps two separate stacks of 2 tyres (to recycle more waste). Wet and shred four weekend newspapers to the width of your thumbnail (but not the glossy pages). Every once in a while, throw a handful of horse manure or soil into the shredded paper

and give it a stir. Now pack this paper into the tyre well, up into the sides fairly tight. Put a bit more paper and soil into the center hole, add at least 250 g Compost Worms, and then the food scraps. Make a lid cut to size and stack the tyres on the ground, to allow the liquids to drain directly onto the earth. A third tyre can be installed as needed, usually around the sixth month but do not go above four high. When you harvest a tire, pull it out and the ones above move down. For ease of movement later, you could put a nylon mesh bag in between the tires and then have a second person to help move the stack.

You will see other designs that puts tyres on a corrugated roofing panel at an angle to catch the liquid run-off: rarely does this work, and it presents a danger to the ankles from sharp edges, and often the liquids attract flies and is hard to collect. Sitting the tires directly on the ground is easiest.

### **Bath Tubs:**

This is not a stacking system, but instead big pile that runs horizontal. If placed into a wooden frame (to hold it steady), the tub can be raised to working height, preferable on an angle to encourage easy drainage. You will need a container to catch the liquid run-off under the drain if you choose to lift the tub up off the ground. A lid to cover the whole tub can be made very convenient with a pulley, rope and a bit of kiwi-ingenuity. A bathtub can handle 20-30 litres of waste per week, and should be started with no less than 1 kg of worms (personally, I'd start with 3 kg in 10 litres of bedding...but I sell Compost Worms!)

### **Bedding, Compost Worms, Lid, & Looks:**

Bedding is the material worms live and breed in – they eat it too. You can use shredded wet newsprint, compost, soil, peat or leaves mixed with a bit of soil for the bedding. Loosely lay the bedding in the bottom of the container and fill to 3 inches deep. Bury a handful of kitchen scraps, and add Compost Worms. Bedding is different to food – it contains less water and less bacteria (which is the worm's primary food, yum).

We recommend no less than 250 g for the basic bins or tyres, and 1 kg for the bath – the more worms you have, the faster the system will recycle food scraps. The older the worm farm, the more robust it becomes.

Always cover the top with something wet – like newsprint (non-glossy) or natural carpet or underlay. Then cover the whole farm with a lid that will keep out the rain, or nosey visitors like pets, rodents or flies.

Making it look good is sometimes a challenge, but inevitably fun. Trellis is nice, and can be used to hide worm farms or framing (e.g. bath tub). We have used woven flax as a skirting to cover tire stacks, and a bit of paint can always cheer up the bin. And to hold the lid down, use an attractive rock or garden statue...perhaps a troll or gargoyle will brighten your worm bin and honor your recycling efforts. Hope you enjoy!